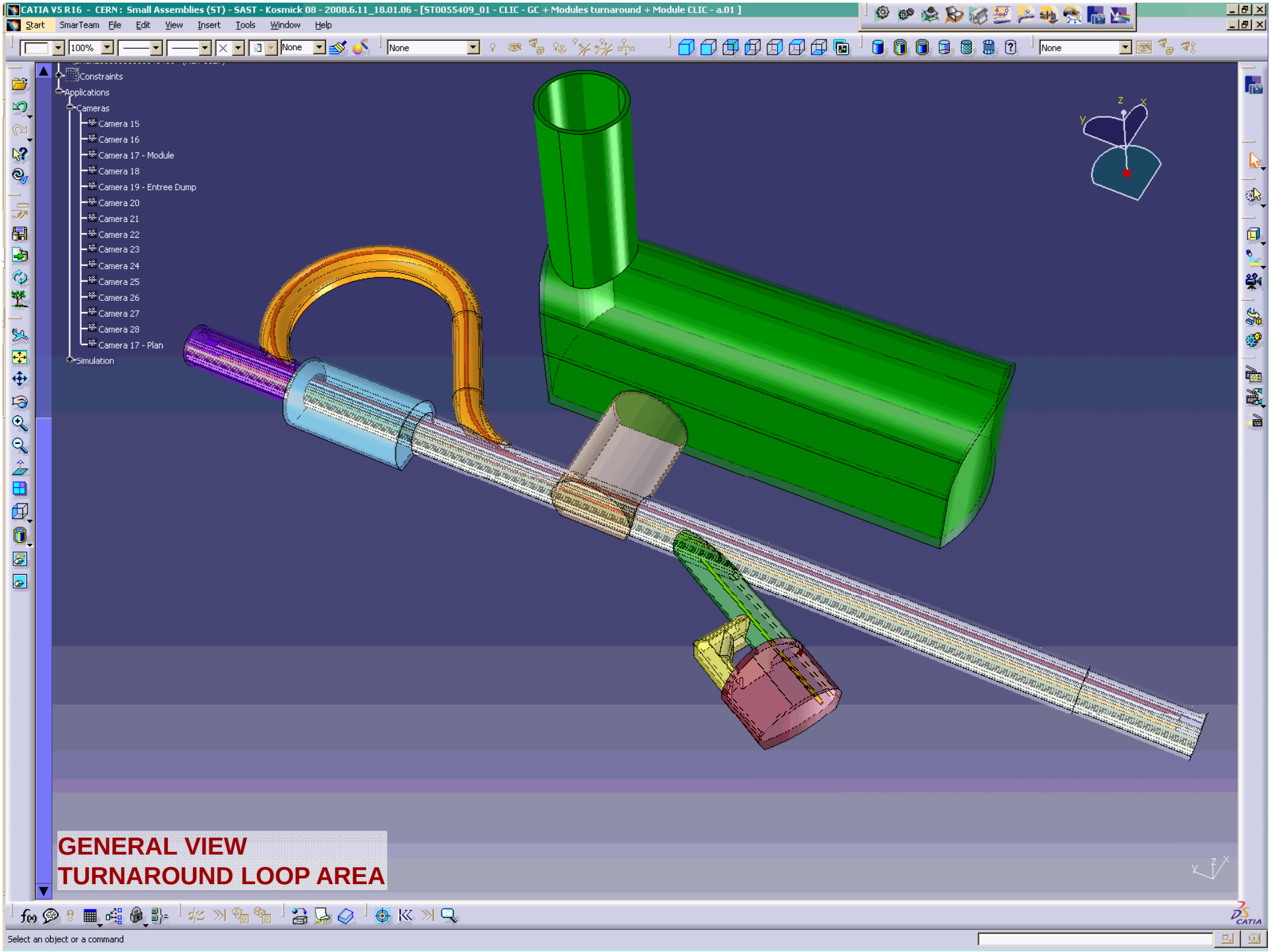
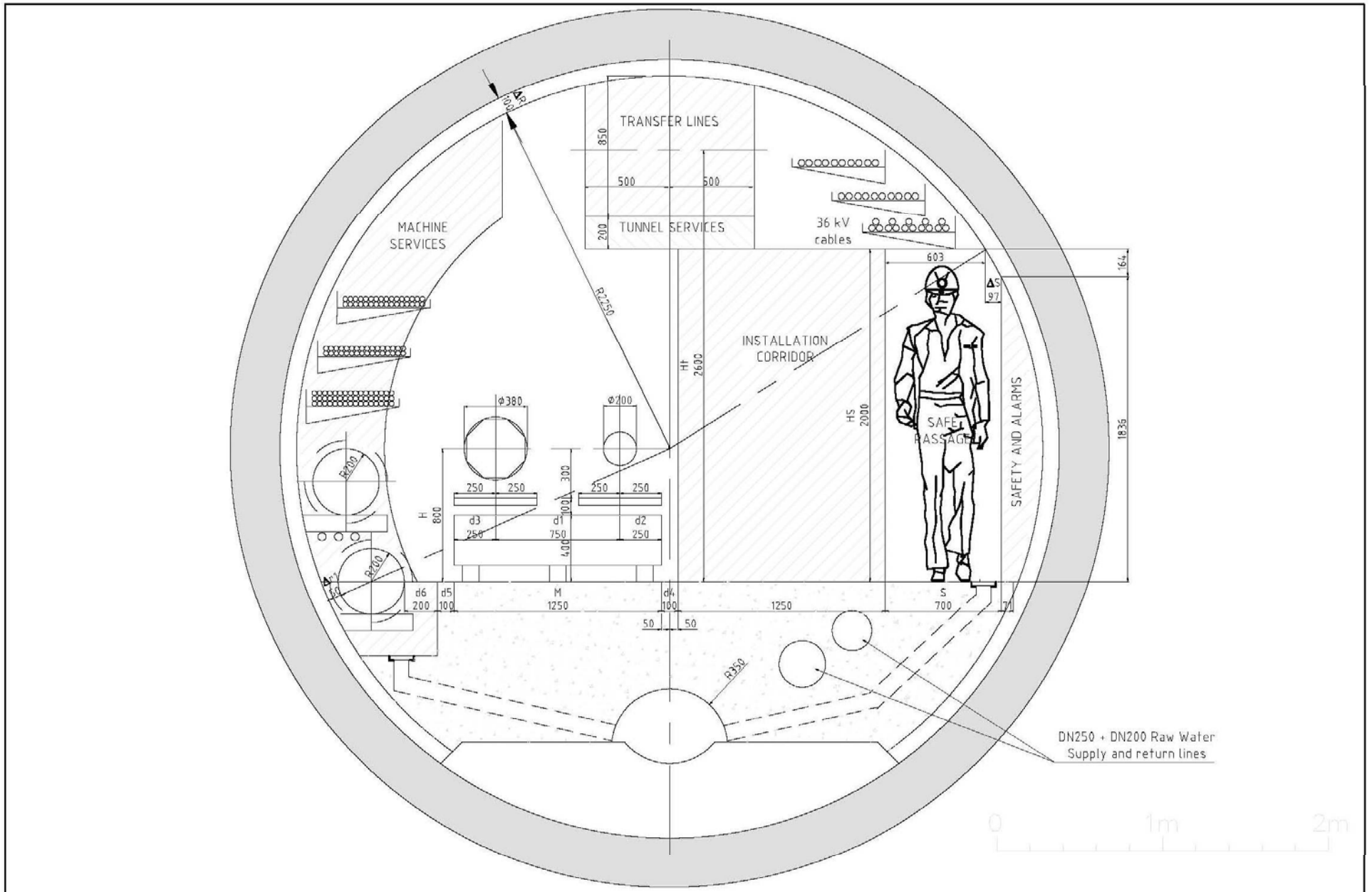
CLIC
3D STUDIES for the Typical Cross Section 3D Study

John Osborne / A.Kosmicki

2008 Oct. 6th


CATIA V5 R16 - CERN : Small Assemblies (ST) - SAST - Kosmick 08 - 2008.6.11_18.01.06 - [ST0055409_01 - CLIC - GC + Modules turnaround + Module CLIC - a.01]
Start SmarTeam File Edit View Insert Tools Window Help
Constraints
Applications
Cameras
Camera 15
Camera 16
Camera 17 - Module
Camera 18
Camera 19 - Entree Dump
Camera 20
Camera 21
Camera 22
Camera 23
Camera 24
Camera 25
Camera 26
Camera 27
Camera 28
Camera 17 - Plan
Simulation
GENERAL VIEW
TURNAROUND LOOP AREA
Select an object or a command



CLIC TUNNEL TYPICAL CROSS SECTION

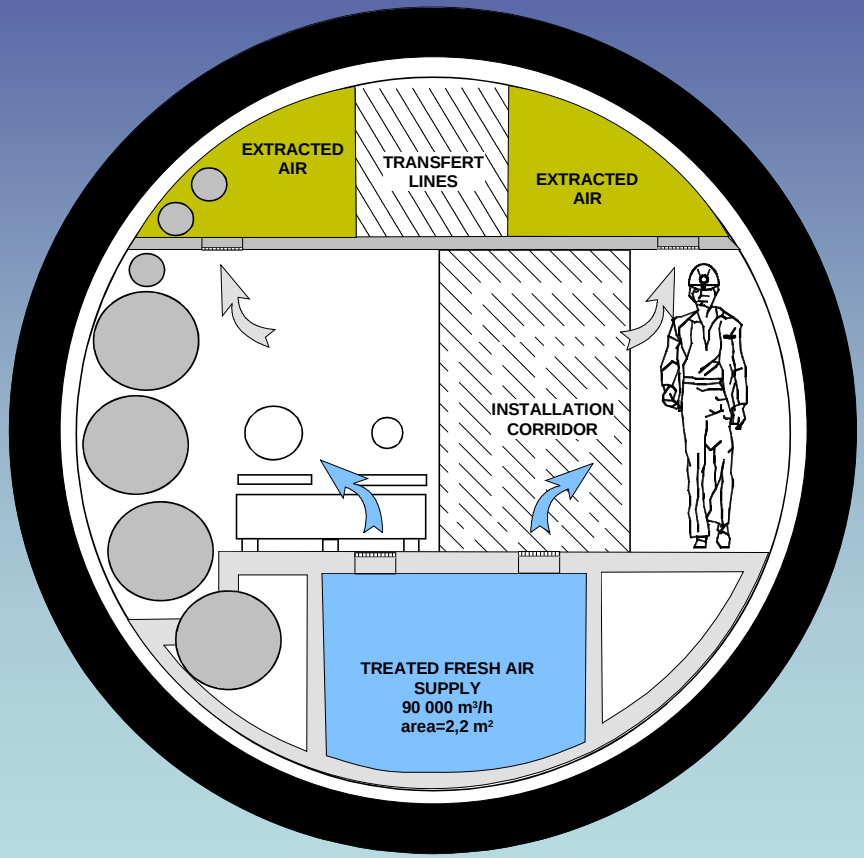
CERN

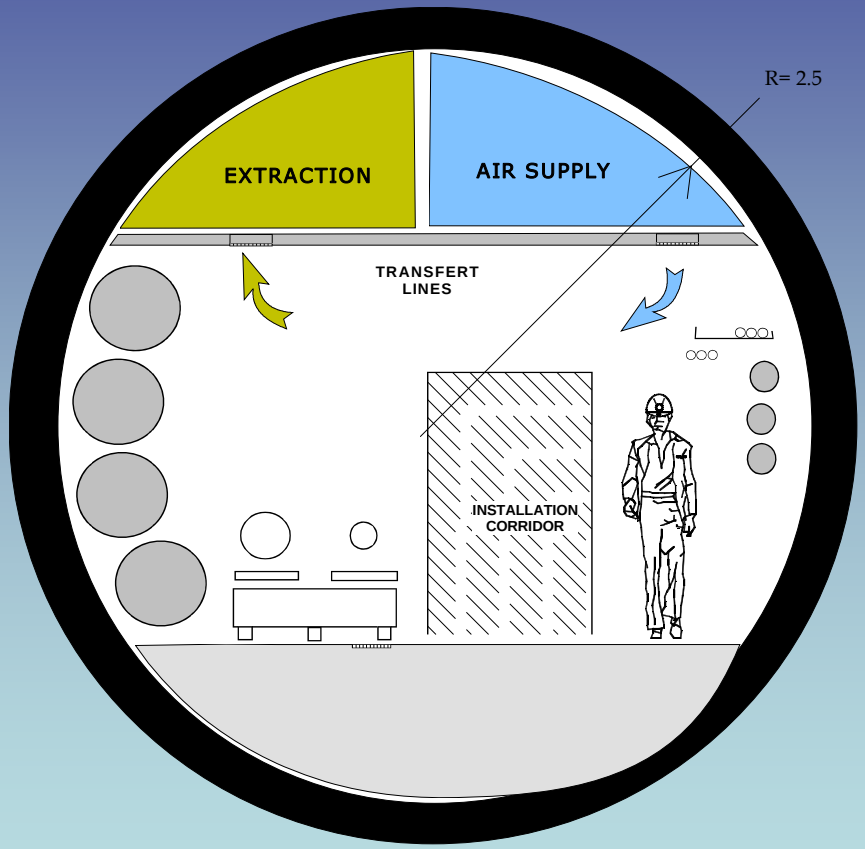
GROUP : TS-CE
CIVIL ENGINEERING
SUPERVISEUR : C.WYSS
DESIGNER : N.BADDAMS

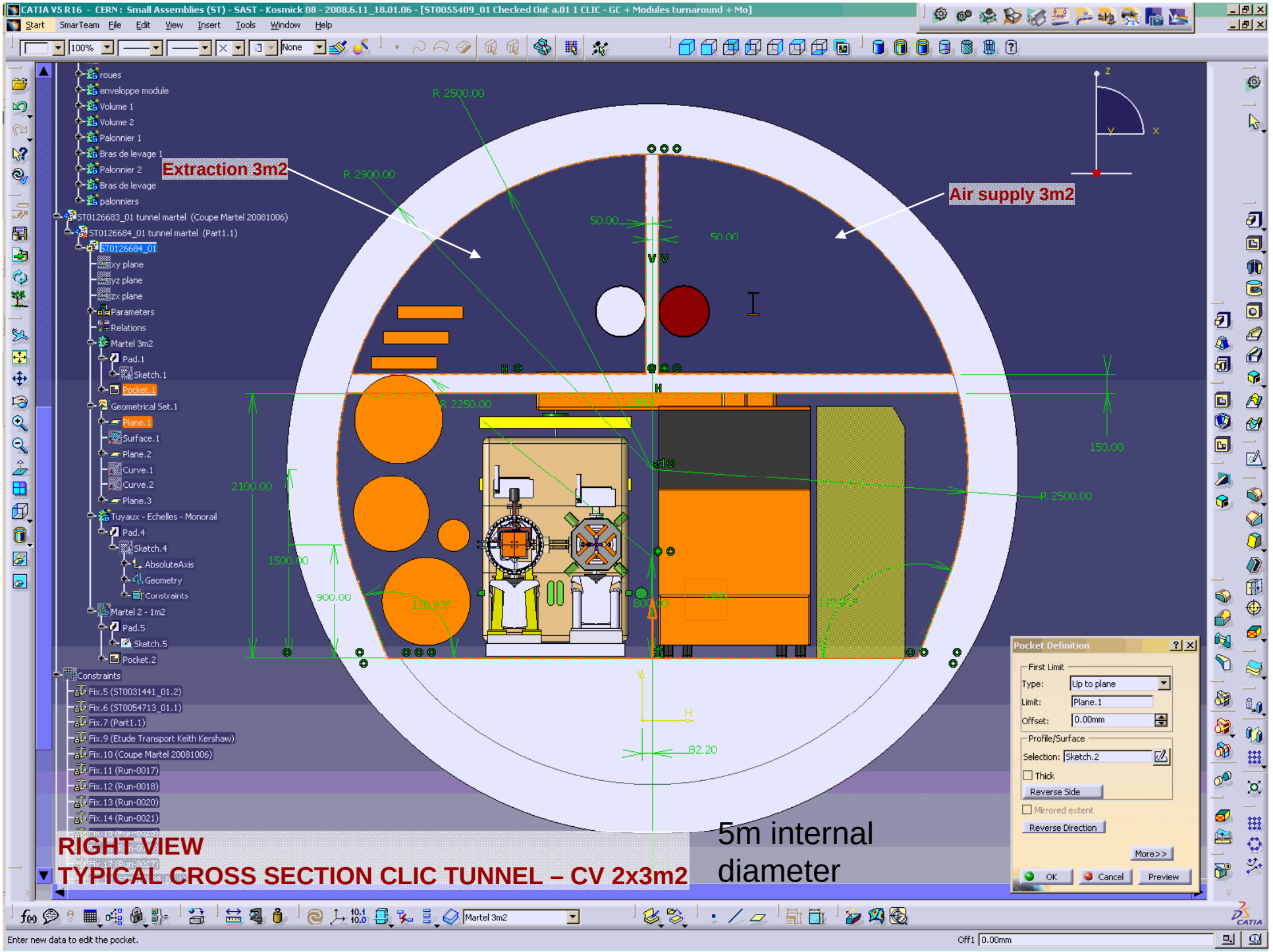
SCALE : 1/20(A3_FORMAT) DATE : 14_MAY_2007

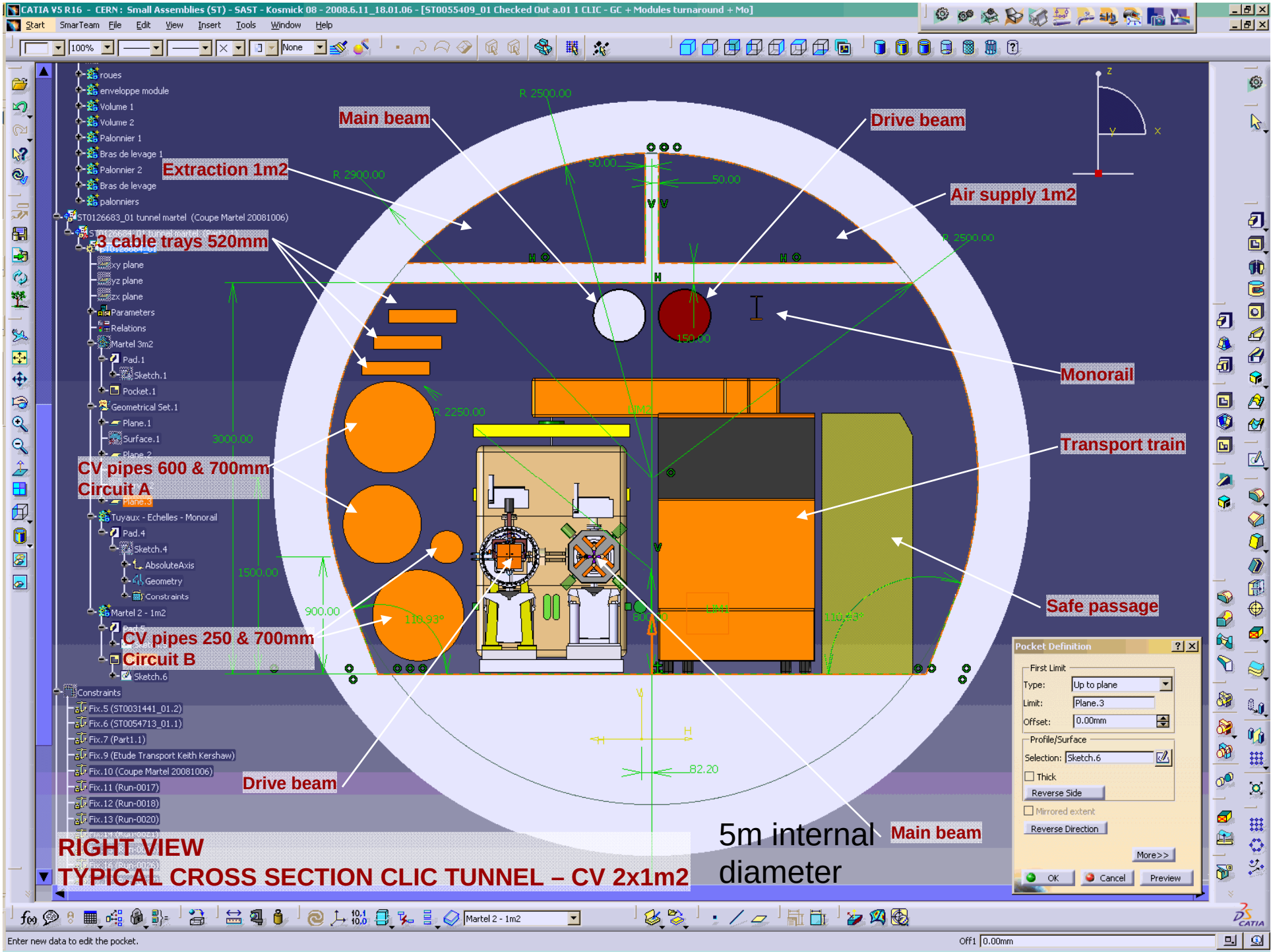
CLIC.CE-1.1710.0004 | SIZE 3 | INDICE -

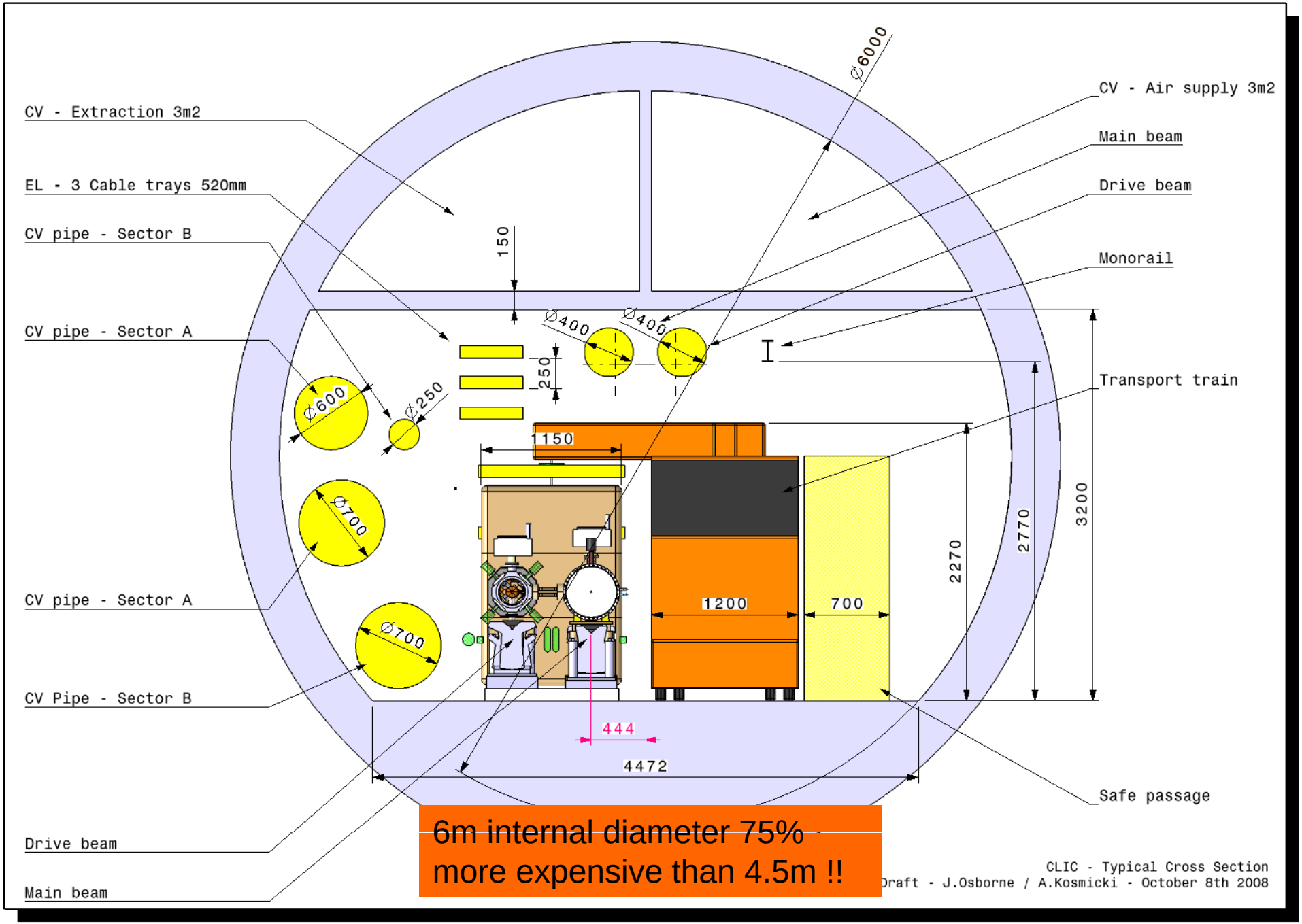
Tunnel section principles

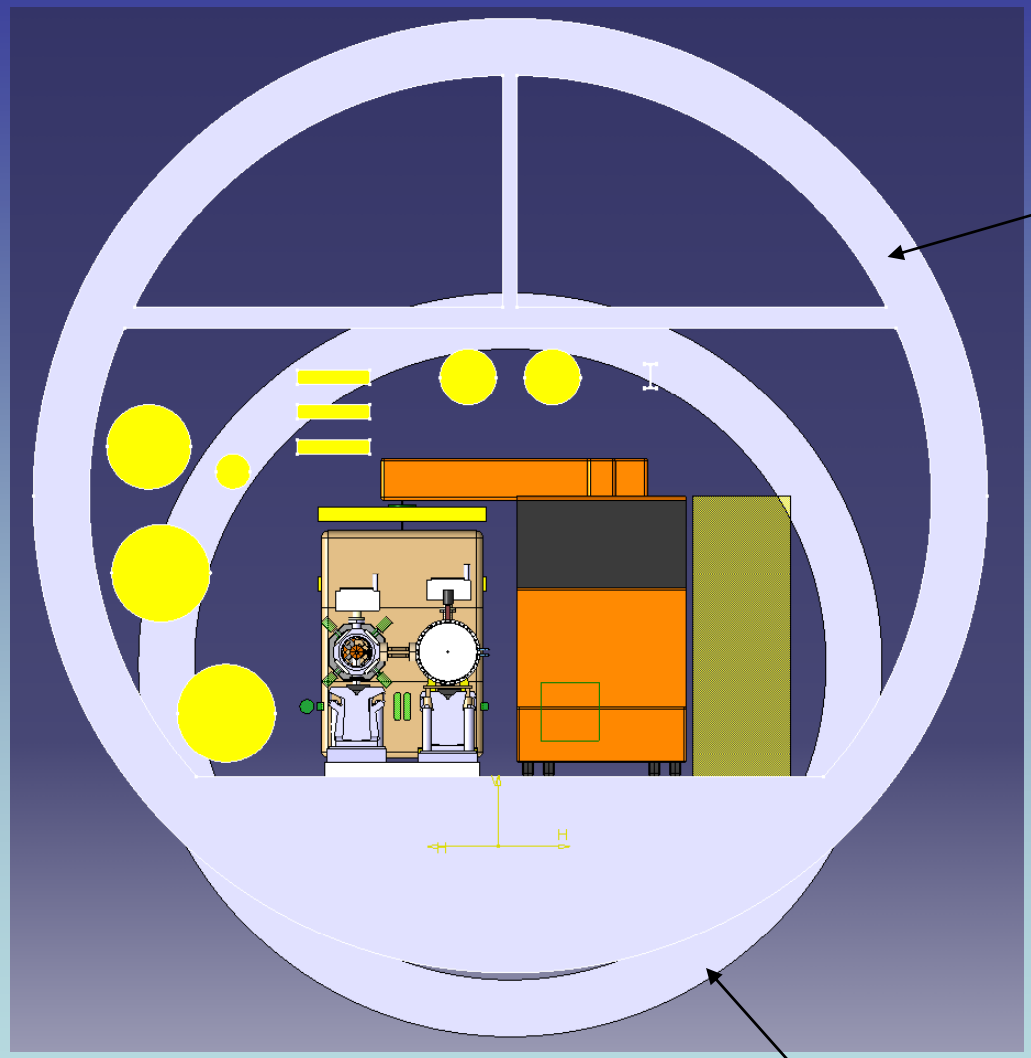





CATIA V5 R16 - CERN : Small Assemblies (ST) - SAST - Kosmick 08 - 2008.6.11_18.01.06 - [ST0055409_01 Checked Out a.01 1 CLIC - GC + Modules turnaround + Mo]
Extraction 3m2
Air supply 3m2
R 2500.00
R 2900.00
R 2250.00
2100.00
1500.00
900.00
150.00
110.93°
82.20
RIGHT VIEW
TYPICAL CROSS SECTION CLIC TUNNEL – CV 2x3m2
5m internal diameter
Pocket Definition
First Limit
Type: Up to plane
Limit: Plane.1
Offset: 0.00mm
Profile/Surface
Selection: Sketch.2
Thick
Reverse Side
Mirrored extent
Reverse Direction
More>>
OK
Cancel
Preview
Enter new data to edit the pocket.


Main beam
Drive beam
Extraction 1m2
Air supply 1m2
3 cable trays 520mm
Monorail
Transport train
CV pipes 600 & 700mm
Circuit A
CV pipes 250 & 700mm
Circuit B
Safe passage
Drive beam
Main beam
5m internal diameter
RIGHT VIEW
TYPICAL CROSS SECTION CLIC TUNNEL – CV 2x1m2


CV - Extraction 3m2
EL - 3 Cable trays 520mm
CV pipe - Sector B
CV pipe - Sector A
CV pipe - Sector A
CV Pipe - Sector B
Drive beam
Main beam
CV - Air supply 3m2
Main beam
Drive beam
Monorail
Transport train
Safe passage
Ø6000
Ø400
Ø400
Ø600
Ø250
Ø700
Ø700
150
250
150
1200
700
2270
2770
3200
444
4472
6m internal diameter 75%
more expensive than 4.5m !!
CLIC - Typical Cross Section
Draft - J.Osborne / A.Kosmicki - October 8th 2008



6m internal diameter

4.5 internal diameter

ILC FP7 : Work Package 5 : ILC siting in Europe

CERN Technical Support (TS) Department Input

		Approx.
General Co-ordination	J.Osborne / C.Hauviller	10%
Civil Engineering	J.Osborne	25%
Civil Engineering Draughtsman	N.Baddams / A.Kosmicki	15%
Cooling & Ventilation	J.Inigo Golfin / C.Martel	20%
Horizontal transport	K.Kershaw	15%
Vertical Handling	I.Ruehl	5%
Safety Advice	F.Corsanego / S.Weisz	10%
		100%

*No input from Electrical Group available at the moment

Planning for CLIC08 Workshop :
Wed 15th Afternoon session

14:00	[45] **CLIC Tunnel Layout and Cross-Section** by John Andrew OSBORNE (CERN) (Room B: 14:00 - 14:20)
	[153] **Discussion** (Room B: 14:20 - 14:30)
	[46] **Cooling and Ventilation in the Tunnel** by Christophe MARTEL (CERN) (Room B: 14:30 - 14:50)
	[154] **Discussion** (Room B: 14:50 - 15:00)
15:00	[47] **Module Integration** by Alexandre SAMOSHKIN (Joint Inst. for Nuclear Research (JINR)) (Room B: 15:00 - 15:20)
	[155] **Discussion** (Room B: 15:20 - 15:30)
	[48] **Transport of the CLIC Modules and Elements** by Keith KERSHAW (CERN) (Room B: 15:30 - 15:50)
	[156] **Discussion** (Room B: 15:50 - 16:00)
16:00	Coffee break (16:00 - 16:15)
	[49] **ILC Underground Consideration** by Victor KUCHLER (Fermilab) (Room B: 16:15 - 16:35)
	[157] **Discussion** (Room B: 16:35 - 16:45)
17:00	[217] **Dubna Siting and ILC Activity at JINR** by Grigori SHIRKOV (JINR) (Room B: 16:45 - 17:05)
	[218] **Discussion** (Room B: 17:05 - 17:15)
	[50] **Safety Issue for Underground Structure** by Fabio CORSANEGO (CERN) (Room B: 17:15 - 17:35)
	[158] **Discussion** (Room B: 17:35 - 17:45)
	[245] **Simulation on radiation levels in the tunnel** (Room B: 17:45 - 18:00)
18:00	[159] **Discussion** (Room B: 18:00 - 18:10)
	[51] **Discussion on Common ILC/CLIC Note on Tunnel Safety** by Hans BRAUN (CERN)